APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,437	06/30/2003	Anthony F. Voellm	50037.188US01	1966

27488   7590   03/18/2008
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EXAMINER
ALHIJA, SAIF A

ART UNIT	PAPER NUMBER
2128	

MAIL DATE	DELIVERY MODE
03/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/611,437	VOELLM ET AL.
	Examiner	Art Unit
	SAIF A. ALHIJA	2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>17 December 2007</u>.

2a)☒ This action is FINAL.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-24</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 June 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-24 have been presented for examination.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

NON-PRIOR ART ARGUMENTS

i)   Applicants have not argued the 101 rejections of claims 1-24 that were previously presented. Applicants merely state that the claims have been amended. Therefore the 101 rejections are maintained, see below for further explanation.

PRIOR ART ARGUMENTS

ii)   Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

EXAMINERS NOTES

iii)   The Examiner has cited particular columns and line numbers in the references applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

iv)   The Examiner respectfully requests, in the event the Applicants choose to amend or add new claims, that such claims and their limitations be directly mapped to the specification, which provides support for the subject matter. This will assist in expediting compact prosecution.

v)   Further, the Examiner respectfully encourages Applicants to direct the specificity of their response with regards to this office action to the broadest reasonable interpretation of the claims as presented. This will avoid issues that would delay prosecution such as limitations not explicitly presented in the claims, intended use statements that carry no patentable weight, mere allegations of patentability, and novelty that is not clearly expressed.

vi)   The Examiner also respectfully requests Applicants, in the event they choose to amend, to supply

a clean version of the presented claims in addition to the marked-up copy in order to avoid potential inaccuracies

with the version of the claims that would be examined.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions
> and requirements of this title.

MPEP 2106 recites:

The claimed invention as a whole must accomplish a practical application. That is, it must produce a

"useful, concrete and tangible result" State Street 149 F.3d at 1373, 47 USPQ2d at 1601-02. A process that consists

solely of the manipulation of an abstract idea is not concrete or tangibles. See In re Warmerdam, 33 F.3d 1354,

1360, 31 USPQ2d 1754, 1759 (Fed.Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459.

3.   **Claims 1-24 are rejected** under 35 U.S.C. 101 because the claimed invention is directed to non-statutory

subject matter.

i)   Claims 1, 13, 18, and 19 recite a computer readable medium having components or encoded with a

data structure as well as a computer implemented method. The claims merely discuss configuring, computing, as

well as a plurality of data fields. As such the claims do not produce a useful, concrete, and tangible result.

Applicant's amendments reciting utilizing the server to rebalance the resources does not overcome the lack of

a tangible result in the claims.

ii)   With regards to Claims 13 and 18, MPEP Section 2106.01 states that the definition of "data

structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation

functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993). The data

structure claimed appears to contain non-functional descriptive language since the claim limitations are merely a

collection of data fields. As such the claims do not produce a useful, concrete, and tangible result. **Applicant's**

amendments reciting utilizing the server to rebalance the resources does not overcome the lack of a tangible

result in the claims and the mere manipulation of data.

iii)   The specification of the instant application in paragraph 18 states

> [0018]   Computing device 100 may also contain commu-
> nication connections 116 that allow the device to commu-
> nicate with other computing devices 118, such as over a
> network. Communication connections 116 is one example of
> communication media. Communication media may typi-
> cally be embodied by computer readable instructions, data
> structures, program modules, or other data in a modulated
> data signal, such as a carrier wave or other transport mecha-
> nism, and includes any information delivery media. The
> term "modulated data signal" means a signal that has one or
> more of its characteristics set or changed in such a manner
> as to encode information in the signal. By way of example,
> and not limitation, communication media includes wired
> media such as a wired network or direct-wired connection,
> and wireless media such as acoustic, RF, infrared and other
> wireless media. The term computer readable media as used
> herein includes both storage media and communication
> media.

A carrier wave as well as a "modulated data signal" are not tangible and are also non-statutory. As

such Claims 1-24 are rendered non-statutory.

Applicants have not explained how their amendments overcome the non-statutory nature of

the claims due to the inclusion of a carrier wave in the specification of the instant application.

iv)   Claims 1-24 are drawn to a mere manipulation of data fields and/or software and therefore the

claims do not produce a useful, concrete, and **tangible result**.

v)   The claims appear to recite a computer program. It should be noted that code (i.e., a computer

software program) does not do anything per se. Instead, it is the code stored on a computer that, *when executed*,

instructs the computer to perform various functions. The following claim is a generic example of a proper computer

program product claim;

A computer program product embodied on a computer-readable medium and comprising code that, when

executed, causes a computer to perform the following:

        Function A
        Function B
        Function C, etc...

   Applicants have not amended the claims to conform to the generic example provided for computer

program claims. As such the claims remain software per se and are therefore non-statutory.

   Appropriate correction is required.

   All claims dependent upon a rejected base claim are rejected by virtue of their dependency.

                                   Claim Rejections - 35 USC § 103

   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set

forth in this Office action:

   (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
   in section 102 of this title, if the differences between the subject matter sought to be patented and the prior
   art are such that the subject matter as a whole would have been obvious at the time the invention was made
   to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
   negatived by the manner in which the invention was made.

   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are

applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as

follows:

   1.   Determining the scope and contents of the prior art.
   2.   Ascertaining the differences between the prior art and the claims at issue.
   3.   Resolving the level of ordinary skill in the pertinent art.
   4.   Considering objective evidence present in the application indicating obviousness or
         nonobviousness.

   This application currently names joint inventors. In considering patentability of the claims under 35
U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time
any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the
obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly
owned at the time a later invention was made in order for the examiner to consider the applicability of 35
U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4.   Claim(s) 1-3, and 5-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Forecast et al.**

"Dynamic Modeling for Resource Allocation in a File Server", U.S. Patent No. 6,230,200, hereafter referred to

as **Forecast,** in view of Ballard **"Client-Side Load-Balancing in Client Server Network", U.S. Patent No.**

6,078,960, hereafter referred to as **Ballard.**

Regarding Claim 1:

The references disclose A computer-readable storage medium having computer-executable components, which when executed rebalance resources, comprising:

a server component configured to receive from a client information that indicates the client needs additional resources to perform a transaction, the server component being further configured to determine if allocating to the client the additional resources puts the server component in a resource constrained situation, and if so, to rebalance resources currently allocated to a plurality of existing clients; **(Forecast. Column 3, Lines 14-20.** *"The allocation balancing routine… allocating or de-allocating an amount of resources…".* **Column 13, Line 15- Column 14, Line 30,** *"scheduler"* and *"admission control policy".* **Column 64, recited allocation code snippet)**

Forecast does not explicitly recite the client side load balancing aspect recited in the claim as wherein each of the clients maintains information about the state of its allocated resources and pending transactions including a current number of outstanding transaction requests and a maximum number of transactions available.

However Ballard discloses client side load balancing **(Ballard. Abstract, "Load balancing is achieved at the client side.")**

Forecast and Ballard are analogous art in the field of resource allocation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the client side load balancing of **Ballard** with the load balancing of **Forecast** in order to produce an *"alternative, more reliable, more flexible technique for achieving load balancing of client demand."* **(Ballard. Column 1, Lines 39-41)**

The Examiner notes that the citations of Ballard and the motivation statement provided applies to all other instances of client side load balancing further recited in the claims.

Regarding Claim 2:

The references disclose The computer-readable medium of claim 1, wherein the server component executes on a server in a network environment. **(Forecast. Column 1, Line 67,** *"file server"***)**

Regarding Claim 3:

The references disclose The computer-readable medium of claim 1, wherein the server component is further configured to allocate the client the additional resources needed if the server determines that such allocation does not create the resource constrained situation. **(Forecast. Column 17, Lines 1-10,** *"reasonable size for a disk read request")*

Regarding Claim 5:

The references disclose The computer-readable medium of claim 1, wherein the server component determines if the resource constrained situation occurs by comparing a current number of resources allocated to the client with a total number of available resources. **(Column 3, Lines 14-20.** *"The allocation balancing routine… allocating or de-allocating an amount of resources…".)*

Regarding Claim 6:

The references disclose The computer-readable medium of claim 5, wherein the determination further comprises comparing a current number of resources allocated to every client connected to the server component with the total number of available resources. **(Column 3, Lines 14-20.** *"The allocation balancing routine… allocating or de-allocating an amount of resources…".)*

Regarding Claim 7:

The references disclose The computer-readable medium of claim 6, wherein the determination further comprises comparing the current number of resources allocated to every client connected to the server component and a number of requested resources with the total number of available resources. **(Column 3, Lines 14-20.** *"The allocation balancing routine… allocating or de-allocating an amount of resources…".)*

Regarding Claim 8:

The references disclose The computer-readable medium of claim 1, wherein the rebalance of the resources is performed based on an equitable distribution of the resources among the plurality of clients. **(Column 13, Line 15- Column 14, Line 30,** *"scheduler"* **and** *"admission control policy".)*

Regarding Claim 9:

    The references disclose The computer-readable medium of claim 8, wherein the equitable distribution of the resources is based on a number of clients connected to the server component. **(Forecast. Column 8, Lines 63-65,** *"to prevent the video file server from performing conflicting operations in response to concurrent requests from various network clients."*)

Regarding Claim 10:

    The references disclose The computer-readable medium of claim 9, wherein at least one client connection has a preferential weighting with respect to other clients. **(Forecast. Column 12, Line 29-40,** *"a weight and a scheduling flag is assigned to every real-time task."*. **Column 14, Lines 39,** *"weight assigned to real-time task"*)

Regarding Claim 11:

    The references disclose The computer-readable medium of claim 8, wherein the equitable distribution of the resources is based on a number of open files associated with each client connected to the server component. **(Forecast. Column 8, Lines 63-65,** *"to prevent the video file server from performing conflicting operations in response to concurrent requests from various network clients."*)

Regarding Claim 12:

    The references disclose The computer-readable medium of claim 11, wherein at least one open file has a preferential weighting with respect to other open files. **(Forecast. Column 12, Line 29-40,** *"a weight and a scheduling flag is assigned to every real-time task."*. **Column 14, Lines 39,** *"weight assigned to real-time task"*)

Regarding Claim 13:

    The references disclose A computer-readable storage medium encoded with a data structure which is utilized by a program to rebalance resources, comprising:

a plurality of data stores, each data store being associated with a different client connection to a server, each data store including: (**Forecast. Column 1, Line 67, file server**)

a credits used field that identifies a number of resource credits currently in use by a client corresponding to the data store; (**Forecast. Column 2, Lines 52-65, resource allocation.**)

a credit limit field that identifies a number or resources available to the client corresponding to the data store; (**Forecast. Column 2, Lines 52-65, resource allocation.**)

a pending count field that identifies a number of transactions that are pending due to an unavailability of sufficient resources to handle the transactions; (**Forecast. Column 3, Lines 14-20, *"imbalance condition"***)and

an open files field that identifies a number of files that are currently in use by the client; (**Forecast. Column 63, Lines 15-20. Opening files and allocation of needed resources**)

Forecast does not explicitly recite the client side load balancing aspect recited in the claim as wherein the server receives a transaction request message from the client; and wherein the server rebalances resource when the transaction request places the server in a resource constrained situation.

However Ballard discloses client side load balancing (**Ballard. Abstract, "Load balancing is achieved at the client side."**)

Forecast and Ballard are analogous art in the field of resource allocation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the client side load balancing of **Ballard** with the load balancing of **Forecast** in order to produce an *"alternative, more reliable, more flexible technique for achieving load balancing of client demand."* (**Ballard. Column 1, Lines 39-41**)

The Examiner notes that the citations of Ballard and the motivation statement provided applies to all other instances of client side load balancing further recited in the claims.

Regarding Claim 14:

The references disclose The computer-readable medium of claim 13, wherein the data store further comprises a flag field that identifies whether the corresponding client has acknowledged a resource-related message.

(Forecast. Column 12, Line 29-40, *"a scheduling flag is assigned to every real-time task."***)**

Regarding Claim 15:

The references disclose The computer-readable medium of claim 13, wherein a value of the pending count field is provided by the client in connection with a transaction request message. **(Forecast. Column 2, Lines 52-65, data stream access and allocation with balancing of resources)**

Regarding Claim 16:

The references disclose The computer-readable medium of claim 15, wherein a value of the credit limit field is modified based on the value of the pending count field. **(Forecast. Column 2, Lines 52-65, data stream access and allocation with balancing of resources)**

Regarding Claim 17:

The references disclose The computer-readable medium of claim 13, wherein values for the credit limit fields of the plurality of data stores is rebalanced based on an equitable distribution of available resources.

(Forecast. Column 8, Lines 63-65, "*to prevent the video file server from performing conflicting operations in response to concurrent requests from various network clients."***)**

Regarding Claim 18:

The references disclose A computer-readable storage medium having computer executable components which when executed rebalance resources, comprising:

a server component configured to: receive information from a client that indicates the client needs additional resources to perform a transaction; and to rebalance resources currently allocated to the client; wherein the client maintains information about the state of its allocated resources and pending transactions within a data structure, comprising:

a credits used field that identifies a number of resource credits currently in use by a client corresponding to the data structure;

a credit limit field that identifies a number or resources available to the client;

a pending count field that identifies a number of transactions that are pending due to an unavailability of sufficient resources to handle the transactions; and

a pending queue field that includes transaction messages corresponding to the transactions that are pending.

See rejection for claims 13-17. Pending transactions can be seen in Column 12, Lines 29-40 with respect to "scheduling flag" and "pending work."

Regarding Claim 19:

The references disclose A computer-implemented method for rebalancing resources, comprising:

computing a total number of client connections, each client connection being associated with a client connected to a server, each client having a credit limit that identifies a number of resources that are allocated to the client; wherein the client maintains information about the state of its allocated resources including a current number of outstanding credits used and a maximum number of credits available;

computing a total number of pending requests that identifies a number of transaction requests that are not being handled due to a limitation on resources;

computing a total number of credits in use; and

if the total number of pending requests and the total number of credits in use combined exceeds a total number of available resources, calculating a new credit limit for each of the clients connected to the server; and

reallocating the total available resources in accordance with the new credit limits.

See rejection for claims 13-17. Reallocating resources with new limits is seen in Column 57, Lines 5-15 with basing scheduling on actual level of resources available.

Regarding Claim 20:

The references disclose The computer-implemented method of claim 19, wherein the reallocation is based on each client connection receiving a pro rata share of the total available resources. **(Forecast. Column 12, Lines 57-Column 13, Line 6, *"priority."* Column 15-16 discuss constraint conditions and priority which reads on**

"pro rata".)

Regarding Claim 21:

    The references disclose The computer-implemented method of claim 20, wherein the pro rata share of the total available resources is based on the total available resources divided among the total number of client connections. **(Forecast. Column 12, Lines 57-Column 13, Line 6, *"priority."* Column 15-16 discuss constraint conditions and priority which reads on "pro rata".)**

Regarding Claim 22:

    Forecast does not explicitly recite The computer-implemented method of claim 21, wherein the total available resources are divided evenly among the total number of client connections.

    However Ballard discloses even distribution. **(Ballard. Column 5, lines 36-38, *"equal division". Figure 4A)***

    Forecast and Ballard are analogous art in the field of resource allocation.

    It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the even load balancing of **Ballard** with the load balancing of **Forecast** in order to produce an *"alternative, more reliable, more flexible technique for achieving load balancing of client demand."* (Ballard. Column 1, Lines 39-41)

    The Examiner notes that the citations of Ballard and the motivation statement provided applies to all other instances of client side load balancing further recited in the claims.

Regarding Claim 23:

    The references disclose The computer-implemented method of claim 21, wherein at least one of the client connections is weighted more heavily than another of the client connections. **(Forecast. Column 12, Lines 3-11, weighted scheme. Column 12, Line 29-40, *"a weight and a scheduling flag is assigned to every real-time task.".* Column 14, Lines 39, *"weight assigned to real-time task"*)**

Regarding Claim 24:

    The references disclose The computer-implemented method of claim 20, wherein the pro rata share for a

particular client is based on a proportion of a total number of open files to a number of open files for the particular

client. **(Forecast. Column 63, Lines 15-20. Opening files and allocation of needed resources)**

Claim Rejections - 35 USC § 103

    The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set

forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
> in section 102 of this title, if the differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

    The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are

applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as

follows:

    1.   Determining the scope and contents of the prior art.
    2.   Ascertaining the differences between the prior art and the claims at issue.
    3.   Resolving the level of ordinary skill in the pertinent art.
    4.   Considering objective evidence present in the application indicating obviousness or
          nonobviousness.

    This application currently names joint inventors. In considering patentability of the claims under 35
U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time
any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the
obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly
owned at the time a later invention was made in order for the examiner to consider the applicability of 35
U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5.   Claim(s) **4 is** rejected under 35 U.S.C. 103(a) as being unpatentable over **Forecast** in view of **Ballard**

further in view of **in view of Haugseth et al. "Computer Network Controller", U.S. Patent No. 6,856,619,**

hereafter referred to as Haugseth.

Regarding Claim 4:

Forecast in view of Ballard does not explicitly disclose The computer-readable medium of claim 1, wherein the clients and the server component communicate using a light weight input/output protocol.

The light weight input/output protocol is defined in the specification in paragraph 21 as:

> [0021]   Each client has a connection (e.g., connections **204**, **206, 208,** respectively) to the server **201**. The clients and the server **201** may communicate using one of many different communication protocols. One communication protocol that may be used for distributed file systems is the Light Weight I/O (LWIO) protocol. The LWIO protocol enables an application operating on one computer (i.e., the client **203**) to communicate directly with a file system on the server **201** without necessarily involving kernel-mode resources on the client computer. Bypassing kernel-mode operations reduces the overhead associated with distributed file access, resulting in improved performance over other protocols, like TCP/IP. Clients can, however, have both user and kernel level components performing file I/O transactions on the server **201**.

The **Forecast** reference discusses in Column 10, Lines 9-19 utilizing various communication protocols but does not explicitly refer to a LWIO protocol.

However, the **Haugseth** reference discloses SAN/RDMA, which as per the definition of LWIO protocol in the specification, utilize bypass of kernel mode resources and allow for direct access. **(Haugseth. See Claim 1 as well as Column 2, Lines 35-60)**

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a LWIO protocol as defined in the specification and referred to in **Haugseth** as SAN/RDMA in order to allow for increased performance and reducing time for the resource allocation discussed in **Forecast in view of Ballard. (Haugseth. Column 1, Lines 40-50) (Forecast. Column 1, Lines 15-20. Performance Guarantees)**

<u>*Conclusion*</u>

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7.   All Claims are rejected.

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAIF A. ALHIJA whose telephone number is (571)272-8635. The examiner can normally be reached on M-F, 11:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571) 272-22792279. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAA

March 8, 2008

/Kamini S Shah/

Supervisory Patent Examiner, Art Unit 2128